

Work Order ID 92780

92780

Page 1

November-08-12 7:26:04 AM

Item ID: D3391-013
Revision ID:
Item Name: Mid Tube Assembly

Accept

N9000040100

Setup Start *NS1*

Stop *NS2*

Start Date: 08/11/2012 Start Qty: 1.00
Required Date: 22/11/2012 Req'd Qty: 1.00

1

Cust Item ID:

Customer:

Reference:

Approvals: Process Plan: *MLJ*
QC:

Date: 12-11-08 Tooling:

Date:

Run Start *NR1*

Date: SPC (Y/N):

Date:

Stop *NR2*

Sequence ID/ Work Center ID	Operation Description	Set Up/ Run Hours
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Tool ID	Tool #	Plan Code	Accept Qty	Reject Qty	Reject Number	Insp. Stamp
---------	--------	--------------	---------------	---------------	------------------	----------------

Draw Nbr	Revision Nbr
----------	--------------

D3391	1
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100	Skidtubes	0.00
-----	-----------	------

100

Skidtubes	Memo	0.00
-----------	------	------

Skidtubes

1-Cut tube to finish length as per Dwg D3391

2-Identify as D3391-013

3-Drill pilot holes using DT8796 (including "B" holes) and drill only 1 fwd saddle hole on one side only as per Dwg D3391

4-Open saddles and GHW holes to Ø0.375" except for fwd saddle hole of detail "J"

5-Remove .030" from Fwd indexing Ridge as per Dwg D3391

6-Remove indexing ridge on Fwd & Aft end of skidtube as per Dwg D3391

7-Deburr

8-Drill #30 pilot holes using wearplate Jig DT8217 Identify Ø0.250" holes with paint marker.

9-Open wearplate holes of D3391-013 assembly detail section H-H to Ø0.297" (20 holes) as per Dwg D3391. DO NOT OPEN HOLES OF SECTION G-G

10-Open .375" holes to .438" ***do not open fwd saddle holes***

11- Locate electric step holes at 39.6875" from fwd end and drill using DT 9612

~ DEC 13/07/09

Work Order ID 92780

92780

Page 2

November-08-12 7:26:04 AM

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N9000040100

Setup Start *NS1*

Stop *NS2*

Start Date: 08/11/2012 Start Qty: 1.00

1

Required Date: 22/11/2012 Req'd Qty: 1.00

1

Cust Item ID:

Customer:

Reference:

Approvals: Process Plan:

Date:

Tooling:

Date:

Run Start *NR1*

QC:

Date:

SPC (Y/N):

Date:

Stop *NR2*

Sequence ID/
Work Center ID

Operation
Description

Set Up/
Run Hours

Tool ID Tool # Plan
Code Accept Reject
Qty Qty it Reject Insp.
Number Stamp

12- Locate D3391-021 in D3391-023 at 9.00" (see view z-z)

13- Transfer drill one fwd saddle hole only to .188" dia, transfer drill all remaining fwd saddle holes using DT 8149 locating from previously drill .188" dia hole, using t-pins and clicos to ensure perfect allingment, open up previously tranfer drilled pilot holes in D3391-013/-011 to 0.438" dia. in D3391-011

14- Locating from two fwd wearplate holes drill remaining 6 wearplate holes in D3391-011 using DT8937

15- ON FIRST SIDE ONLY drill out 2nd and forth fwd saddles holes to 0.500" as per

16- ON 2ND SIDE ONLY ream out 2nd and forth saddle hole to 0.499"

17- Deburr and blow out all chips from inside tube

110

110

QC

Quality Control

QC5- Inspect part completeness to step on W/O 0.00

Memo

0.00

1379

- DC13/07/09

Work Order ID 92780

92780

Page 3

November-08-12 7:26:04 AM

Item ID: D3391-013
Revision ID:
Item Name: Mid Tube Assembly

Start Date: 08/11/2012 Start Qty: 1.00 *1*
Required Date: 22/11/2012 Req'd Qty: 1.00 *1*

Reference:

Approvals: Process Plan: Date: Tooling: Date:
QC: Date: SPC (Y/N):

Sequence ID/ Work Center ID	Operation Description	Set Up/ Run Hours
120	Chemical Conversion Coat per QSI005 4.1	0.00

120
HandFinish
Hand Finishing

Memo

130	QC7-Inspect Chemical Conversion Coat	0.00
-----	--------------------------------------	------

130
QC
Quality Control

Memo

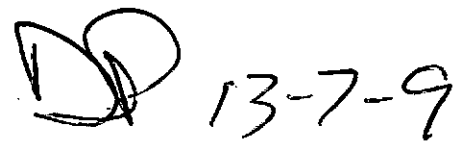
Accept

N9000040100

Setup Start *NS1*
Stop *NS2*

Cust Item ID:
Customer:

Run Start *NR1*
Stop *NR2*

Tool ID	Tool #	Plan Code	Accept Qty	Reject Qty	Reject Number	Insp. Stamp
						
						
						

1111

1

1

1

1

1

1

1

1

1

Work Order ID 92780

92780

Page 4

November-08-12 7:26:04 AM

Item ID: D3391-013
Revision ID:
Item Name: Mid Tube Assembly

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N9000040100

Setup Start *NS1*
Stop *NS2*

Start Date: 08/11/2012 Start Qty: 1.00 *1*
Required Date: 22/11/2012 Req'd Qty: 1.00 *1*

Cust Item ID:
Customer:

Reference:

Approvals: Process Plan: Date: Tooling: Date:
QC: Date: SPC (Y/N):

Run Start *NR1*
Stop *NR2*

Sequence ID/
Work Center ID

Operation
Description

Set Up/
Run Hours

Tool ID Tool # Plan Accept Reject Reject Insp.
Code Qty Qty Number Stamp

140
140
Skidtubes
Skidtubes

Skidtubes

0.00

Memo

0.00

1- Open holes to finish size as per dwg. DO NOT OPEN WEARPLATE HOLES
OF SECTION G-G

2- Prepare for welding

3- Bond web in place as per Dwg D3391 & QSI 015.

*****Ensure Web Alignment *****

A/R Sikaflex Batch: 126149/
Exp. date: 13/11/14

150
150
QC
Quality Control

QC5- Inspect part completeness to step on W/O

0.00

Memo

0.00

- 0213/07/09

1 0 13/07/10

DAS
18



Work Order ID 92780

November-08-12 7:26:04 AM

92780

Page 5

Item ID: D3391-013
Revision ID:
Item Name: Mid Tube Assembly

Accept

N900040100

Setup Start *NS1*
Stop *NS2*

Start Date: 08/11/2012 Start Qty: 1.00 *1*
Required Date: 22/11/2012 Req'd Qty: 1.00 *1*
Reference:

Cust Item ID:
Customer:

Approvals: Process Plan: Date: Tooling: Date:
QC: Date: SPC (Y/N): Date:

Run Start *NR1*
Stop *NR2*

Sequence ID/ Work Center ID	Operation Description	Set Up/ Run Hours	Tool ID	Tool #	Plan Code	Accept Qty	Reject Qty	Reject Number	Insp. Stamp
160	Skidtubes	0.00							
160									
Skidtubes	Memo	0.00							
Skidtubes	1-Weld crossbolt spacer as per dwg D3391 & QSI 004 A/R ALUM Batch: <u>M125127</u>								BE 13/07/10
	2-grind weld flush								
	3- Transfer drill electric step pilot holes only from D3391-013 into D3391-015								
	4- Open electric step holes 0.391" per dwg D3391 (section L-L)								
	5- Open electric step holes 0.297" per dwg D3391 (section M-M)								
	6- Open electric step holes 0.250" per dwg D3391 (section LL-LL)								
	7-Open wearplate holes of D3391-013 assembly detail section G-G to 0.250" (10 holes) as per Dwg D3391								
170	QC10- Inspect visual per QSI004- ground welds	0.00							
170									
QC	Memo	0.00							
Quality Control									

- DC 13/07/10

13-08-01 DAU 09 283

Work Order ID 92780

92780

Page 6

Item ID: D3391-013
 Revision ID:
 Item Name: Mid Tube Assembly
 Start Date: 08/11/2012 Start Qty: 1.00
 Required Date: 22/11/2012 Req'd Qty: 1.00
 Reference:

Accept

N900040100

Setup Start *NS1*
 Stop *NS2*

Cust Item ID:
 Customer:

Approvals: Process Plan: Date: Tooling: Date:
 QC: Date: SPC (Y/N): Date:

Run Start *NR1*
 Stop *NR2*

Sequence ID/ Work Center ID	Operation Description	Set Up/ Run Hours
180	QC5- Inspect part completeness to step on W/O	0.00

180

QC
 Quality Control

Memo

0.00

185	Pressure Wash per QSI005 4.3	0.00
-----	------------------------------	------

185

HandFinish
 Hand Finishing

Memo

0.00

AND REALODINE AS PER PAR09-043

190	White Gloss(Rcf:4.3.5.1) per QSI005 4.3-Alum	0.00
-----	--	------

190

Powdercoat
 Powder Coating

Memo

0.00

START TIME:
 OVEN TEMPERATURE:
 FINISH TIME:

1:10

320 °F

1:40

Tool ID	Tool #	Plan Code	Accept Qty	Reject Qty	Reject Number	Insp. Stamp
						DAS 09 2-83

13-08-01

1 74 13-8-8

1X 4M-13/08/12

M126125

Work Order ID 92780

*November-08-12 7:26:04 AM

92780

Page 7

Item ID: D3391-013
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Item Name: Mid Tube Assembly

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N900040100

Setup Start *NS1*

Stop *NS2*

Start Date: 08/11/2012 Start Qty: 1.00 *1*

Required Date: 22/11/2012 Req'd Qty: 1.00 *1*

Reference:

Cust Item ID:

Customer:

Approvals: Process Plan: Date: Tooling: Date:
QC: Date: SPC (Y/N): Date:

Run Start *NR1*

Stop *NR2*

Sequence ID/ Work Center ID	Operation Description	Set Up/ Run Hours
200	QC3- Inspect Part Finish	0.00
200		
QC	Memo	0.00
Quality Control		
230	HandFinishing	0.00
230		
HandFinish	Memo	0.00
Hand Finishing	1- press fit D3591-1 spacers using DT9416 starting from 0.500" side	
	2- Install inserts	
240	QC5- Inspect part completeness to step on W/O	0.00
240		
QC	Memo	0.00
Quality Control	Inspect thread of each insert using DT8821	

Tool ID Tool # Plan Code Accept Qty Reject Qty Reject Number Insp. Stamp

1x f H 13/08/20

1x f H 13/08/20

DAS
27
9-89

13.8.21

Work Order ID 92780

*November-08-12 7:26:04 AM

92780

Page 8

Item ID: D3391-013
 Revision ID:
 Item Name: Mid Tube Assembly
 Start Date: 08/11/2012 Start Qty: 1.00
 Required Date: 22/11/2012 Req'd Qty: 1.00
 Reference:

Accept

N900040100

Setup Start *NS1*
 Stop *NS2*

Cust Item ID:
 Customer:

Approvals: Process Plan: Date: Tooling: Run Start *NR1*
 QC: Date: SPC (Y/N): Date: Stop *NR2*

Sequence ID/ Work Center ID	Operation Description	Set Up/ Run Hours	Tool ID	Tool #	Plan Code	Accept Qty	Reject Qty	Reject Number	Insp. Stamp
--------------------------------	--------------------------	----------------------	---------	--------	--------------	---------------	---------------	------------------	----------------

250

250

HandFinish

Hand Finishing

HandFinishing

Memo

Assemble as per dwg D3391

0.00

0.00

1 x - 13/08/20

260

260

QC

Quality Control

QC5- Inspect part completeness to step on W/O

Memo

0.00

0.00

DA 27

B & 21

270

270

Packaging

Packaging

Identify as per dwg & Stock Location: w10

Memo

0.00

0.00

D-12-742-041/1395054

1 x - 13/08/21

Work Order ID 92780

92780

Page 9

*November-08-12 7:26:04 AM

Item ID: D3391-013
Revision ID:
Item Name: Mid Tube Assembly

Accept

N900040100

Setup Start *NS1*

Stop *NS2*

Start Date: 08/11/2012 Start Qty: 1.00 *1*

Required Date: 22/11/2012 Req'd Qty: 1.00 *1*

Reference:

Cust Item ID:

Customer:

Approvals: Process Plan: Date: Tooling: Date: SPC (Y/N):
QC: Date:

Run Start *NR1*

Stop *NR2*

Sequence ID/ Work Center ID	Operation Description	Set Up/ Run Hours
280	QC21- Final Inspection - Work Order Release	0.00

280

QC

Memo

0.00

Quality Control

Tool ID	Tool #	Plan Code	Accept Qty	Reject Qty	Reject Number	Insp. Stamp

MCS 13-08-22

pl 13-08-22

Picklist Print

November-08-12 7:26:07 AM

Page 1

Work Order ID: 92780

92780

Parent Item: D3391-013

D3391-013

Parent Item Name: Mid Tube Assembly

Start Date: 08/11/2012

Required Date: 22/11/2012

Start Qty: 1.00

Required Qty: 1.00

Comments:

IPP A05.12.13New Issue:EC
 IPP B06.02.09Dwg rev.D EC
 IPP Rev:06-03-28 Update Manufacturing Instructions JLMIPP rev D
 07.03.14 dwg Rev F EC
 IPP Rev:E ECN 1056 07-11-13 DD verified by: EC
 IPP Rev:F 08-07-28 chg 0.332" to 0.391" dim. hole in comment DD verified
 by:EC
 IPP Rev:G 08-09-08 new process (ecn 08-510) DD verified by:EC
 IPP Rev:H 08-09-10 revH as per dwg DD verified by:EC IPP rev J
 10.03.30 revised process. added D3391-015 to pick list EC verified : DD

Component Item ID/ Item Name	Replacement Item ID	Mfg/ Purch	Bin Item	Primary Location	Last Location	Route Seq ID	Unit of Measure	Qty on Hand	Qty per Kit	Total Qty	Qty Issued	Date Issued	Status
AN960C10L	NAS1149C0332 R	Purchased	No				Each	21.0000					
AN960C10L ✓													
washer													

4
M125654 (AL) M13/08/20

**

D3389-1

Manufactured No

D3389-1

Web

Location	Loc Qty	Loc Code
ST	21	
107534	21	
	Each	7.0000
**		
Location	Loc Qty	Loc Code
LG	7	
85508	4	
86687	3	

B94063

DC13/07/09

(1)

Picklist Print

November-08-12 7:26:07 AM

Page 2

Work Order ID: 92780

Parent Item: D3391-013

Parent Item Name: Mid Tube Assembly

92780

D3391-013

Start Date: 08/11/2012

Required Date: 22/11/2012

Start Qty: 1.00

Required Qty: 1.00

D2500-1-100

Manufactured No

100

Each

157.0000

**

DC 13/07/09

D2500-1-100

Skidtube Extrusion

Location

Loc Qty

Loc Code

HALI

157

50251

3

82373

57

86065

97

MS27039C4-08

Purchased No

100

Each

134.0000

**

12/08/20

MS27039C4-08

SCREW

Location

Loc Qty

Loc Code

310

50

122452

50

ST310

84

122141

84

D3391-011

Manufactured No

140

Each

0.0000

**

DC 13/07/09

D3391-011

Fwd Tube Assembly

D3391-015

Manufactured No

160

Each

0.0000

**

DC 13/07/10

D3391-015

Aft Tube Assembly

B87432

B91940

Picklist Print

November-08-12 7:26:08 AM

Work Order ID: 92780

Parent Item: D3391-013

Parent Item Name: Mid Tube Assembly

92780

D3391-013

Start Date: 08/11/2012

Required Date: 22/11/2012

Start Qty: 1.00

Required Qty: 1.00

D3681-1 Manufactured No

160 Each 18.0000 12 12

D3681-1

Spacer

**

BE13/07/10
B101031 212

Location

Loc Qty

Loc Code

LG

8

80361

1

87611

7

LG001

10

68958

2

69893

2

71845

2

74874

1

76004

1

77501

2

ALS4-428-165

Purchased No

230 Each 391.0000 4 4

ALS4-428-165

Inserts

**

13/08/20

Location

Loc Qty

Loc Code

FP002

391

114172

18

117769

373

D3591-1

Manufactured No

230 Each 39.0000 2 2

D3591-1

Bushing

**

13/08/20

Location

Loc Qty

Loc Code

FP

5

80377

4

82027

1

ST059

34

57350

1

83237

33

B100699

X2

Picklist Print

November-08-12 7:26:08 AM

Page 4

Work Order ID: 92780

Parent Item: D3391-013

Parent Item Name: Mid Tube Assembly

92780

D3391-013

Start Date: 08/11/2012

Required Date: 22/11/2012

Start Qty: 1.00

Required Qty: 1.00

ALS4-1032-130

Purchased

No

250

Each

389.0000

26

26

AI S4-1032-130

Insert

**

13/08/20

Location

Loc Qty

Loc Code

ST280

205

M126109

✓26

119084

116

120671

89

ST281

44

120807

36

120837

8

ST282

140

121269

140

AN960C416L

NAS1149C0432

Purchased

No

250

Each

0.0000

4

4

*AN960C416I * ✓

WASHER

D3672-1

Manufactured

No

250

Each

1.351.000

4

4

D3672-1

Phenolic Washer

**

11/22/41 (2v) 13/08/20

**

13/08/20

Location

Loc Qty

Loc Code

FG

10

B99099

✓4

85222

10

FP001

2

80369

2

ST061

1339

72229

4

76277

21

83608

500

85222

334

91325

480

Picklist Print

November-08-12 7:26:08 AM

Page 5

Work Order ID: 92780

Parent Item: D3391-013

Parent Item Name: Mid Tube Assembly

92780

D3391-013

Start Date: 08/11/2012

Required Date: 22/11/2012

Start Qty: 1.00

Required Qty: 1.00

D3672-3

Manufactured No

250 Each

1.619.000 4 4

D3672-3

Phenolic Washer

**

13/08/20

Location

Loc Qty

Loc Code

FG

20

84432

20

ST061

1599

84432

13

86517

61

88441

500

89273

510

91915

515

X4

MS27039C1-09

Purchased No

250 Each

100.0000 4 4

MS27039C1-09

SCREW

**

13/09/20

Location

Loc Qty

Loc Code

FP002

8

17831

8

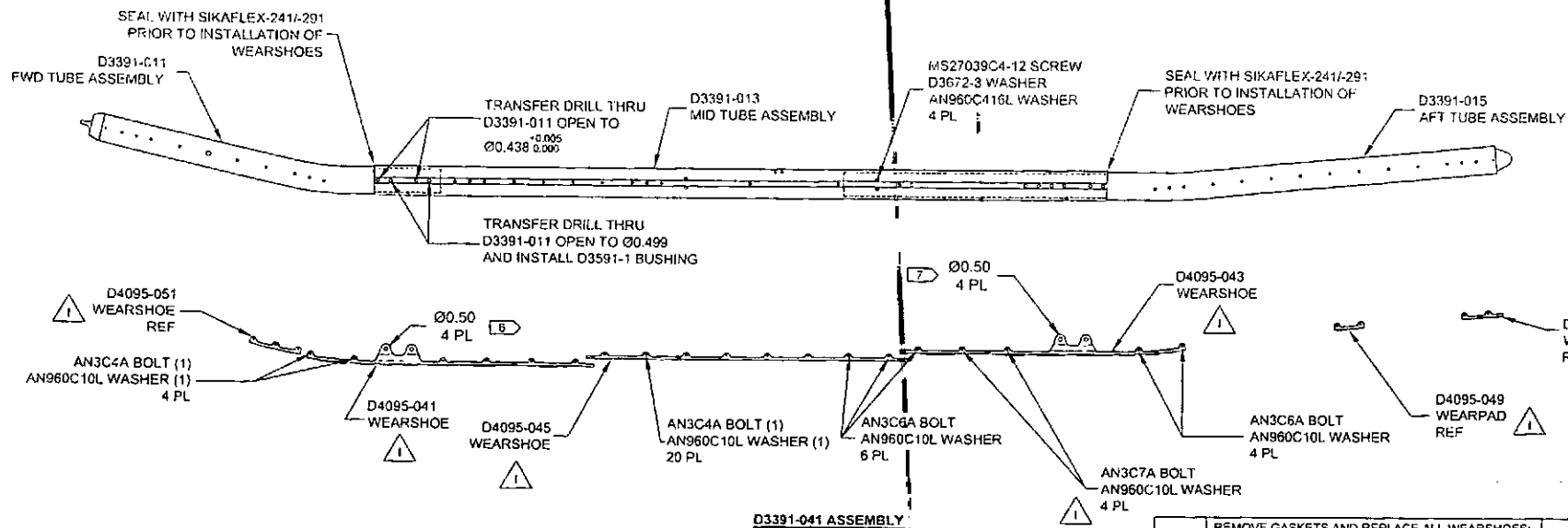
ST293

92

116290

92

X4



D3391-041 FLOAT SKIDTUBE ASSEMBLY PARTS LIST

QTY	PART NUMBER	DESCRIPTION
X	D3391-041	FLOAT SKIDTUBE ASSEMBLY
1	D3391-011	FWD TUBE ASSEMBLY
1	D3391-013	MID TUBE ASSEMBLY
1	D3391-015	AFT TUBE ASSEMBLY
2	D3591-1	BUSHING
4	D3672-3	WASHER
1	D4095-041	WEARSHOE
1	D4095-043	WEARSHOE
1	D4095-045	WEARSHOE
1	D4095-047	WEARPAD
1	D4095-049	WEARPAD
1	D4095-051	WEARSHOE
24	AN3C4A	BOLT
10	AN3C6A	BOLT
4	AN3C7A	BOLT
38	AN960C10L	WASHER
4	MS27039C4-12	SCREW
4	AN960C416L	WASHER

GENERAL NOTES

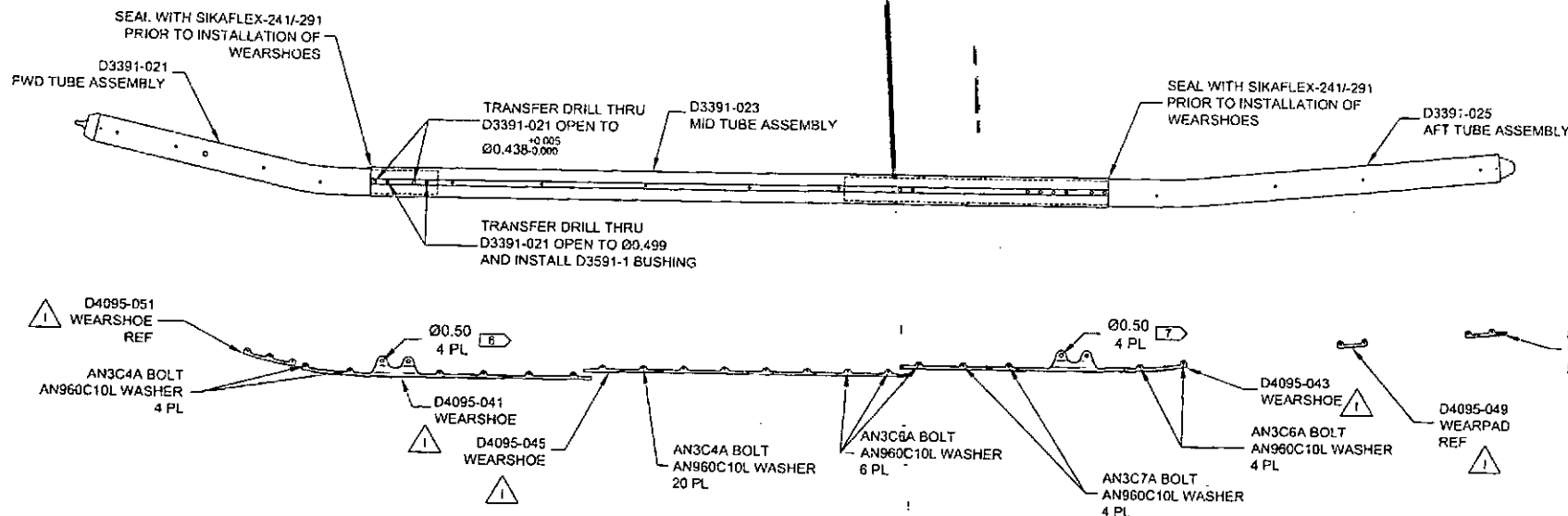
- 1) FINISH: CHEMICAL CONVERSION COAT PER DART QSI 005 4.1 POWDER COAT WHITE (4.3.5.1) PER DART QSI 005 4.3
- 2) COAT ALL EXPOSED FASTENERS WITH LPS LABORATORIES "LPS PROCYON" AFTER FINAL ASSEMBLY, CLEAN EXCESS OFF POWDER COATING WITH MEK DEGREASER.
- 3) TOLERANCES: PER DART QSI 018 UNLESS OTHERWISE NOTED
- 4) UNITS: INCHES UNLESS OTHERWISE NOTED
- 5) USE DART DRILL TEMPLATE DT8217 TO LOCATE AND DRILL Ø0.297 SIZE HOLES FOR WEARSHOE INSERTS. CBORE AS NOTED AND INSTALL INSERTS EXCEPT WHERE INDICATED.
- 6) FIT D4095-041 TO SKIDTUBE WITH D2571 AND D2572 SADDLES INSTALLED WITH APPROPRIATE HARDWARE AND SPACERS IN FORWARD AND AFT HOLES AND TRANSFER DRILL Ø0.50 HOLES FROM SADDLE TO D4095-041
- 7) FIT D4095-043 TO SKIDTUBE WITH D2571 AND D2572 SADDLES INSTALLED WITH THE APPROPRIATE HARDWARE AND SPACERS IN FORWARD AND AFT HOLES AND TRANSFER DRILL Ø0.50 HOLES FROM SADDLE TO D4095-043

RELEASED
2011-11-04
ECNH 11-662

I	REMOVE GASKETS AND REPLACE ALL WEARSHOES: PARTS LIST UPDATE, ZN A8-1, ZN A8-2, ZN A8-4, ZN B6-8; LPS-3 COATING REMOVED FROM NOTE 2, ZN A3-1, ZN A3-2. REMOVED INSERT AEL-S-1032-130, ZN B6-4, B2-4, C7-8, C3-8; REMOVED HOLES, ZN D8-4 ZN D2-4, ZN D7-8, ZN D3-8	XDF	11.10.13
H	DRAWING UPDATED TO CURRENT STANDARDS. SHT 1 PL ADDED D3591-1 BUSHING, ZN C6 Ø0.438 DIM WAS 4 PL, ADDED Ø0.499 DIM AND D3591-1 BUSHING. SHT 2 PL ADDED D3591-1 BUSHING, ZN C6 Ø0.438 DIM WAS 4 PL, ADDED Ø0.499 DIM AND D3591-1 BUSHING. (FOR FURTHER INFO SEE DSI 9364 & NCR 06-074)	AJS	08.08.20
G	REPLACE NAS INSERTS W/ AELS INSERTS SWITCH TO D3670-XXXX SPACERS FOR INSTALLING FLOAT BAGS, DWG REORGANIZED FOR CLARITY	CC	07.07.31
F	ADD SS WEARSHOE, GASKET REMOVE FWD SADDLE HOLE -0111-021	PH	07.01.18
E	CHANGE TOLERANCE, EASE MANUFACTURE	PH	06.04.25
D	UPDATE TOLERANCE, CHANGE HOLE SIZE	PH	06.01.23
C	LENGTHEN AFT EXTENSION	PH	05.09.27
B	DRAWING UPDATES	PH	05.06.10
A	NEW ISSUE	PH	05.02.07
REV.	DESCRIPTION	BY	DATE
DESIGN	PH		
DRAWN	XDF		
CHECKED			
MFG. APPR.			
APPROVED			
DE APPR.			
DATE	11.10.13		

SHOW TO
RETURN TO
ENGINEER
UNCONTROLLED COPY
SUBJECT TO APPROVAL
WITH NO EFFECT
WORK ORDER
NO. 92780 MLJ
12-11-08

92780





D3391-043 FLOAT SKIDTUBE ASSEMBLY PARTS LIST

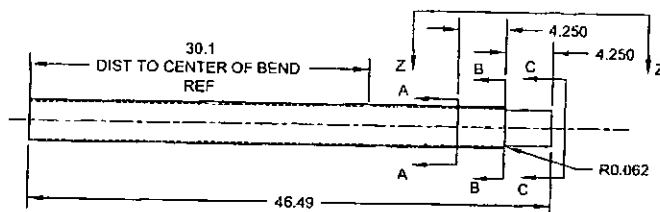
QTY	PART NUMBER	DESCRIPTION
X	D3391-043	FLOAT SKIDTUBE ASSEMBLY
1	D3391-021	FWD TUBE ASSEMBLY
1	D3391-023	MID TUBE ASSEMBLY
1	D3391-025	AFT TUBE ASSEMBLY
2	D3591-1	BUSHING
1	D4095-041	WEARSHOE
1	D4095-043	WEARSHOE
1	D4095-045	WEARSHOE
1	D4095-047	WEARPAD
1	D4095-049	WEARPAD
1	D4095-051	WEARSHOE
24	AN3C4A	BOLT
10	AN3C6A	BOLT
4	AN3C7A	BOLT
38	AN960C10L	WASHER

GENERAL NOTES

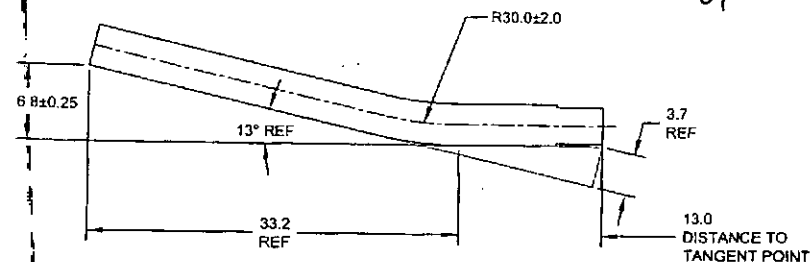
- 1) FINISH: CHEMICAL CONVERSION COAT PER DART QSI 005 4.1
POWDER COAT WHITE (4.3.5.1) PER DART QSI 005 4.3
- 2) COAT ALL EXPOSED FASTENERS WITH LPS LABORATORIES "LPS PROCYON"
- 3) AFTER FINAL ASSEMBLY, CLEAN EXCESS OFF POWDER COATING WITH MEK DEGREASER.
- 4) TOLERANCES: PER DART QSI 018 UNLESS OTHERWISE NOTED
- 5) UNITS: INCHES UNLESS OTHERWISE NOTED
- 6) USE DART DRILL TEMPLATE D78217 TO LOCATE AND DRILL Ø0.297 SIZE HOLES FOR WEARSHOE INSERTS. C'BORE AS NOTED AND INSTALL INSERTS EXCEPT WHERE INDICATED.
- 7) FIT D4095-041 TO SKIDTUBE WITH D2571 AND D2572 SADDLES INSTALLED WITH APPROPRIATE HARDWARE AND SPACERS IN FORWARD AND AFT HOLES AND TRANSFER DRILL Ø0.50 HOLES FROM SADDLE TO D4095-041
- 8) FIT D4095-043 TO SKIDTUBE WITH D2571 AND D2572 SADDLES INSTALLED WITH THE APPROPRIATE HARDWARE AND SPACERS IN FORWARD AND AFT HOLES AND TRANSFER DRILL Ø0.50 HOLES FROM SADDLE TO D4095-043

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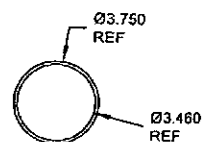
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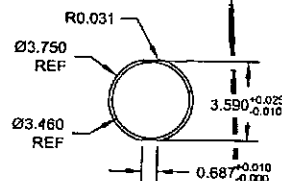
D3391-1 CUTTING DETAIL
(MAKE FROM D6013-047 SKIDTUBE MATERIAL)



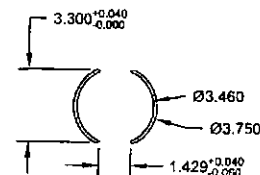
D3391-011/-021 BENDING DETAIL
(MAKE FROM D3391-1)



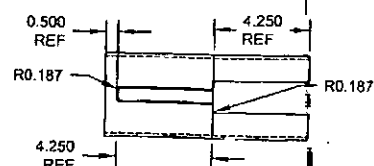
SECTION A-A
SCALE 2X



SECTION B-B
SCALE 2X



SECTION C-C
SCALE 2X

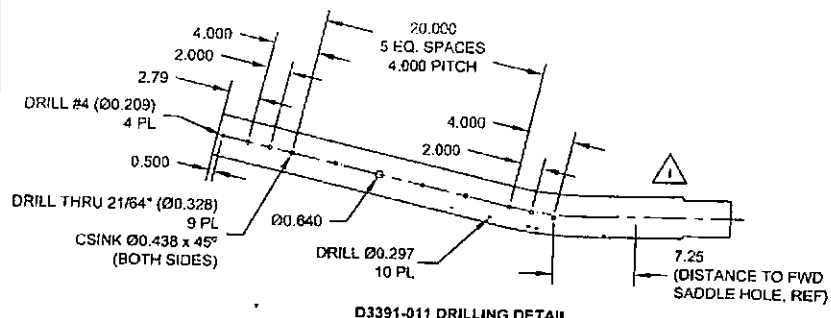


VIEW Z-Z
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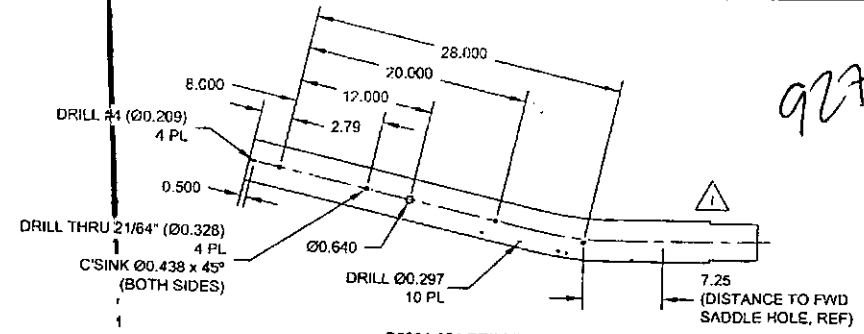
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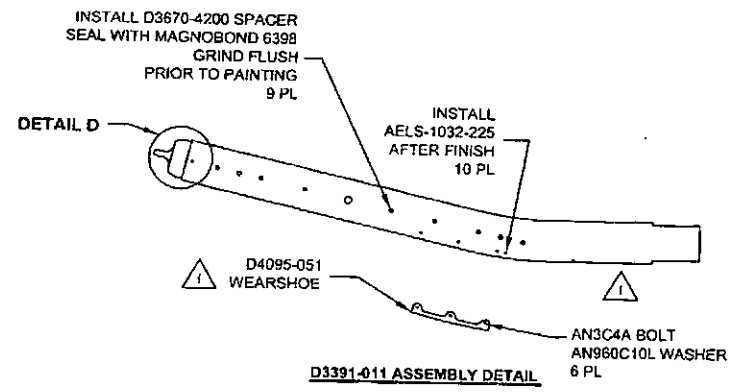
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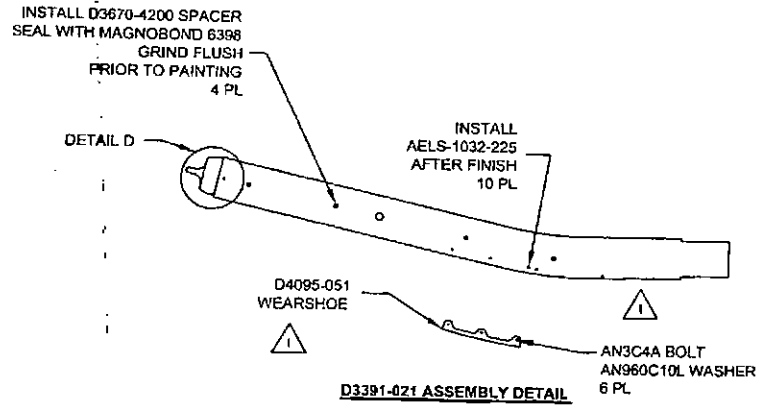
D3391-011 DRILLING DETAIL



D3391-021 DRILLING DETAIL



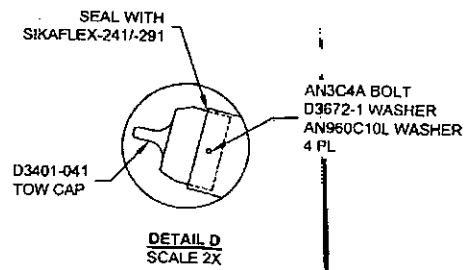
D3391-011 ASSEMBLY DETAIL



D3391-021 ASSEMBLY DETAIL

D3391-011/021 FWD TUBE ASSEMBLY PARTS LIST

QTY - 011	QTY - 021	PART NUMBER	DESCRIPTION
X		D3391-011	FWD TUBE ASSEMBLY
	X	D3391-021	FWD TUBE ASSEMBLY
1	1	D3401-041	TOW CAP
9	4	D3670-4200	SPACER
4	4	D3672-1	WASHER
1	1	D4095-051	WEARSHOE
1	1	D6013-047	FWD TUBE
10	10	AN3C4A	BOLT
10	10	AN960C10L	WASHER
10	10	AELS-1032-225	INSERT

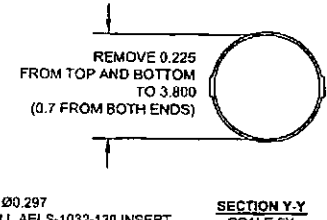
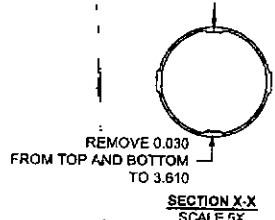
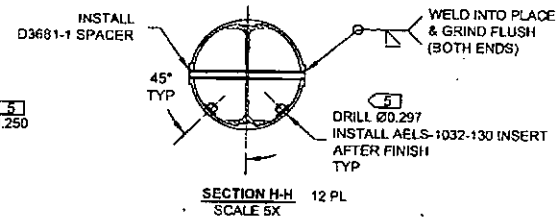
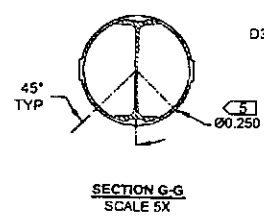
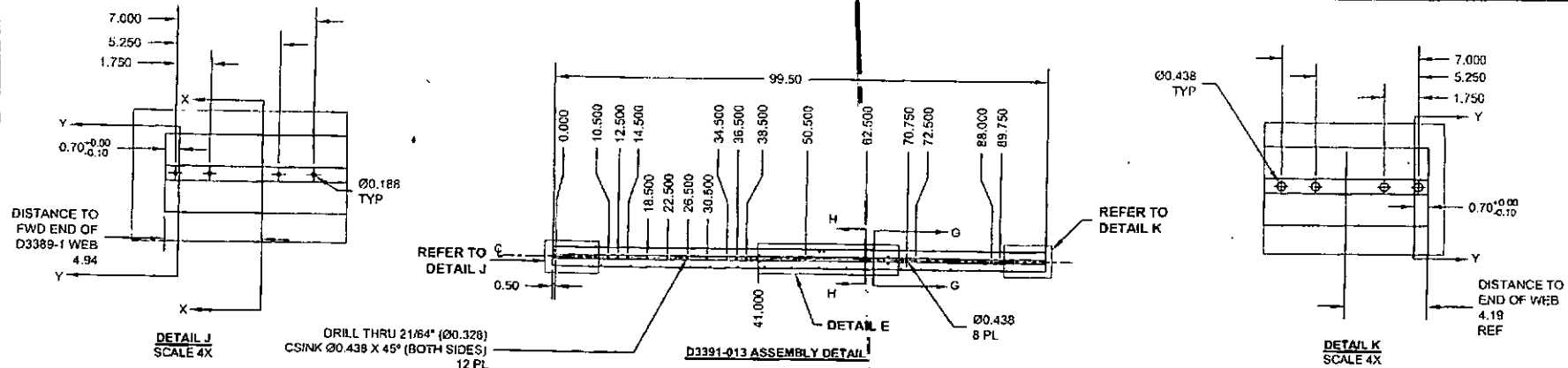


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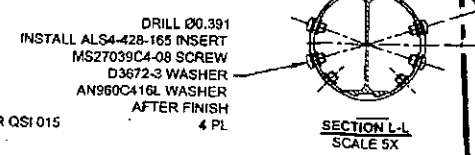
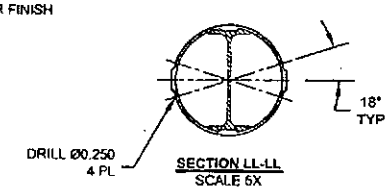
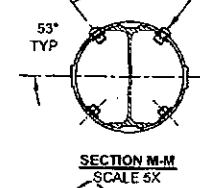
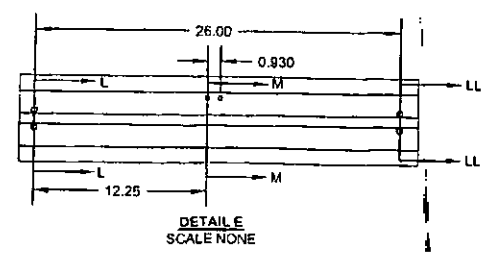
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D3391-013 MID TUBE ASSEMBLY PARTS LIST

QTY -013	PART NUMBER	DESCRIPTION
X	D3391-013	MID TUBE ASSEMBLY
1	D2500-1-100	EXTRUSION
1	D3389-1	WEB
4	D3672-1	WASHER
4	D3672-3	WASHER
12	D3681-1	SPACER
24	AELS-1032-130	INSERT
4	ALS4-428-165	INSERT
4	AN960C10L	WASHER
4	AN960C416L	WASHER
4	MS27039C1-09	SCREW
4	MS27039C4-08	SCREW



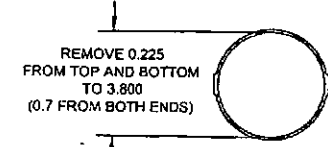
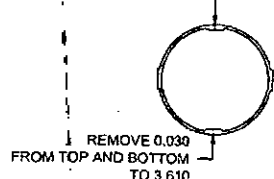
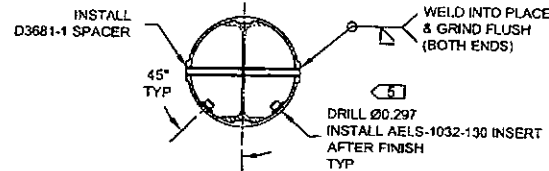
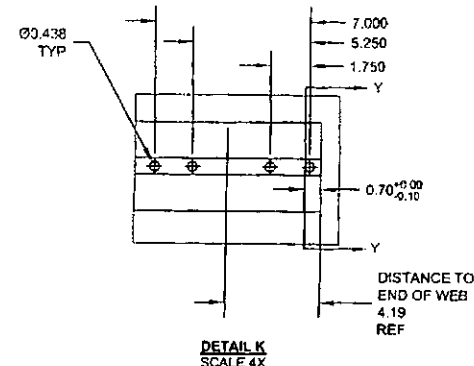
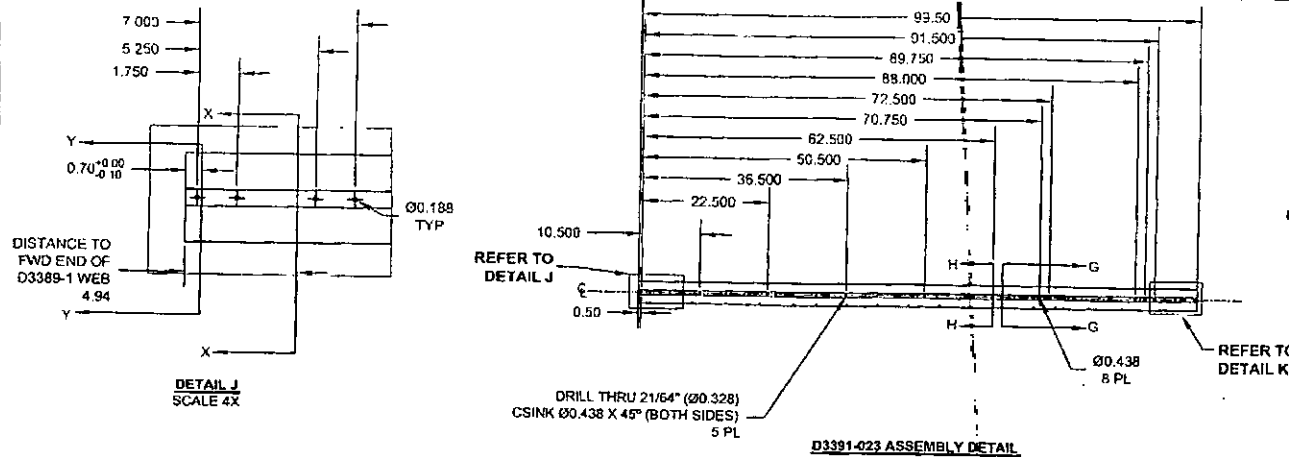
D3391-013 MID TUBE ASSEMBLY

- 1) MATERIAL: MAKE FROM D2500-1-100 EXTRUSION
- 2) INSTALL D3389-1 WEB TO OUTER TUBE USING SIKAFLEX-241/291 PER QSI 015
- 3) WELDING, PER DART QSI 004

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D3391-023 MID TUBE ASSEMBLY PARTS LIST

QTY - 023	PART NUMBER	DESCRIPTION
X	D3391-023	MID TUBE ASSEMBLY
1	D2500-1-100	EXTRUSION
1	D3388-1	WEB
5	D3681-1	SPACER
20	AELS-1032-130	INSERT

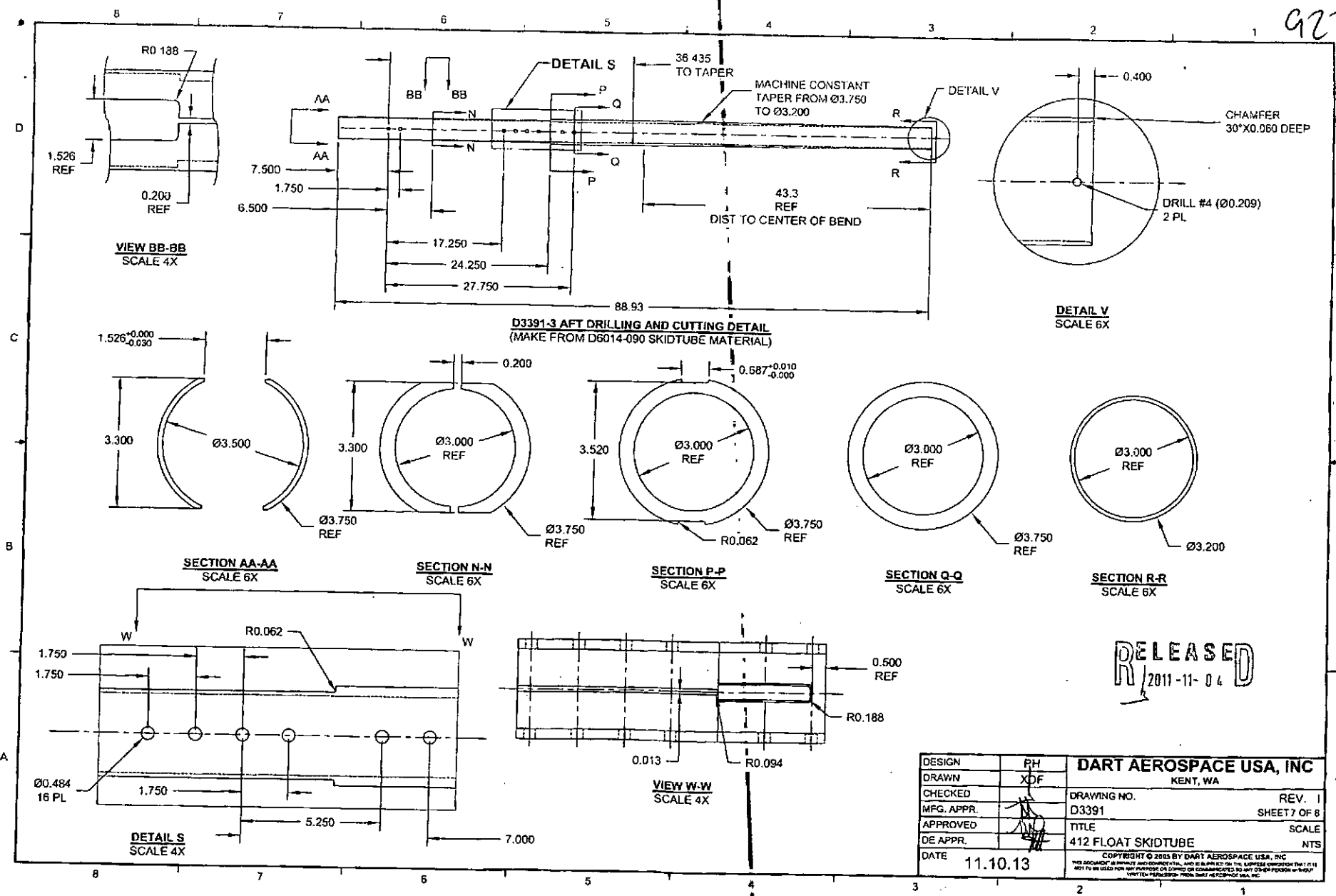
D3391-023 MID TUBE ASSEMBLY

- 1) MATERIAL: MAKE FROM D2500-1-100 EXTRUSION
- 2) INSTALL D3388-1 WEB TO OUTER TUBE USING SIKAFLEX-241/291 PER QSI 015
- 3) WELDING: PER DART QSI 004

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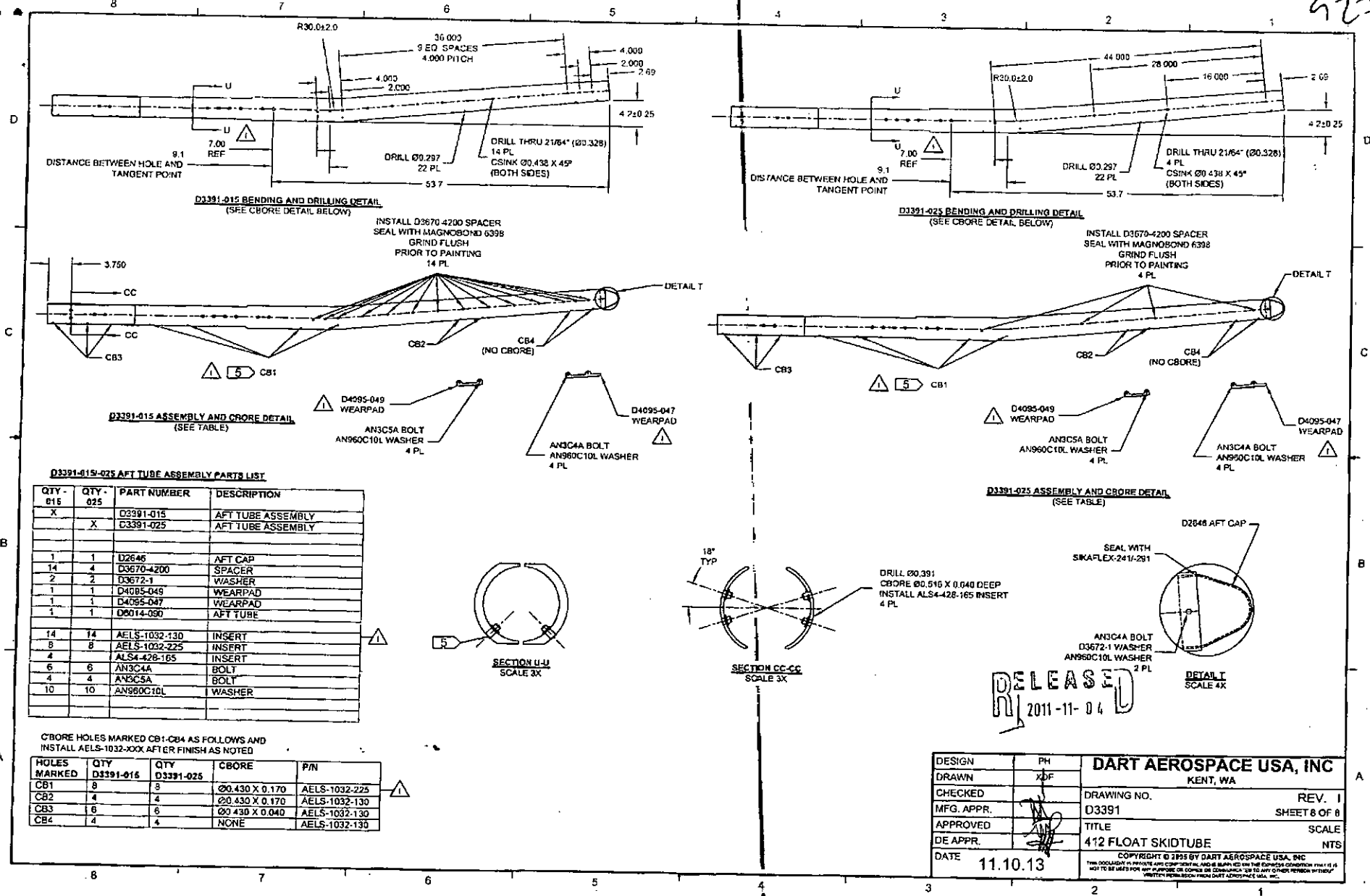
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NO. 324

AWS D17.1.2001
QUALIFICATION TEST RECORD

Name: Barclay Elliott
Job #: 102486
Part #: D3391-023
Description: Mid tube
Welding Process: Tig [✓] Mig []
Base material: Aluminum
Current: AC [✓] DC []

TEST REQUIREMENTS AND RESULTS

Visual:	pass[✓]	fail[]
Incomplete Penetration:	pass[✓]	fail[]
Incomplete Fusion:	pass[✓]	fail[]
Cracks:	pass[✓]	fail[]
Overlap (cold lap)	pass[✓]	fail[]
Undercut:	pass[✓]	fail[]
Pin holes:	pass[✓]	fail[]
Porosity (surface):	pass[✓]	fail[]
Coloration:	pass[✓]	fail[]
Burn through:	pass[✓]	fail[]

Qualifier DAS 09 Date of Test Coupon 13-06-19

Welder Barclay Elliott Date of Test Coupon 13-06-19

The above named individual is qualified in accordance with AWS D17.1.2001 to weld

